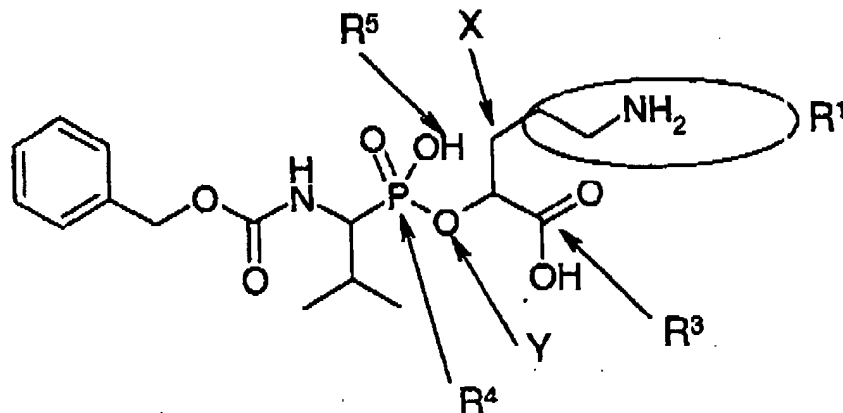


REMARKS

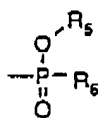
Claims 1, 6, 9, 18 and 20 remain pending in the application; no claim amendments are presented herein. The title of the application has been amended in accordance with the Examiner's request. A number of amendments have been made to the specification in the interests of clarity and correcting inadvertent errors. No new matter has been introduced by any of the amendments herein.

The previous rejection of the claims under 35 USC §103(a) as being obvious over US 5,550,119 to De Lombaert, et al. in combination with US 5,801,271 to Seido, et al. has been maintained. The Examiner asserts that Applicants' previous arguments against this rejection are unpersuasive because they "are drawn to subject matter, namely -O-R₆ groups that do not have basis in the claims as presently recited." The Examiner's assessment is incorrect, and Applicants hope to clarify the matter as follows:

In the first place, provided below is the structure of instant Example 1, the elected species, with further clarification as to how this structure falls within the limits of claim 1. The fact is that, in their previous arguments, Applicants did not refer to an -O-R₆ element, nor did their arguments rely on the existence of such an element.



Applicants' reference in their previous response to "a central phosphorus which is oxy-linked to a 5-amino pentanoic acid moiety...and which phosphorus atom is also directly linked to a benzyloxycarbonylaminoalkyl group..." [emphasis added] was apparently not clear to the Examiner. From the structure above, it can be seen that instant Example 1 is the compound of generic Formula (I) of claim 1 wherein R_1 is C_1 - C_6 alkyl substituted with an amino group; R_2 is H; R_3 is $COOR_5$ wherein R_5 is H; R_4 is



wherein R_5 is H and R_6 is C_1 - C_6 alkyl as defined on page 11, lines 1-7 of the specification and is substituted as described on page 13, lines 6-11; X is $C(Z)_2$ wherein Z is H; and Y is O.

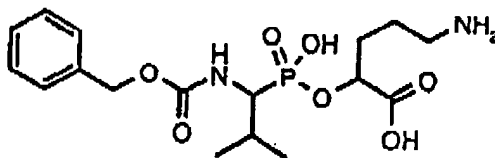
The oxy linkage referred to in Applicants' last response is denoted by Y in the figure above and, as shown, it is the linkage by which R₁ and R₃ (not R₆) are ultimately joined to the phosphorus. In the structure above, R₆ comprises everything to the left of the phosphorus atom. Thus, R₆ is directly joined to the phosphorus atom, and there is no oxy linkage between said phosphorus and R₆. This is in keeping with Applicants' previous arguments, and there is nothing in said arguments that contradicts this structural feature of the instantly claimed compounds. Thus, whether or not -O-R₆ groups have basis in the instant claims is irrelevant to the analysis at hand; Applicants never invoked such groups, and the effectiveness of their previous arguments does not depend on the existence of such groups.

Accordingly, Applicants respectfully request that the Examiner now consider their previous arguments in light of the above explanation that said arguments are indeed drawn to the subject matter encompassed by the instant claims. For the Examiner's convenience, the previous arguments are presented again below verbatim in bold type. It is Applicants' expectation that, upon consideration of the above explanation and the arguments below, the Examiner will find the subject matter of the elected claims allowable over the prior art and will proceed to reinstate and examine additional claimed subject

matter not reading on the single elected species.

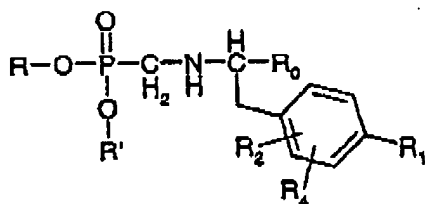
These claims have been rejected under 35 USC §103(a) as being obvious over U.S. Patent No. 5,550,119 to De Lombaert et al. in combination with U.S. Patent No. 5,801,271 to Seido et al. The Examiner asserts that the De Lombaert patent teaches "phosphorus compounds of the type recited in the claims" and that any deficiencies in this teaching are made up by disclosure in the Seido patent. In particular, the Examiner acknowledges that the De Lombaert patent does not teach "the benzyloxycarbonylamine [sic] substituent," but asserts that the Seido patent makes up for this by teaching "analogous pentonic (?) acid derivatives which contain this group in compounds having the same utility." The Examiner's assessment is in error for the following reasons.

In the first place, the single species elected by Applicants, Example 1 of the present application, has the chemical structure:



As can be seen from this formula, the compound is a phosphorus-containing compound comprising a central phosphorus which is oxy-linked to a 5-aminopentanoic acid moiety (see right-hand side of figure above) and which phosphorus atom is also directly linked to a benzyloxycarbonylaminoalkyl group (see left-hand side of figure above). For purposes of instruction and argument, the aminopentanoic acid moiety can also be thought of as an alkyl group substituted by both an amino and a carboxyl group.

On the other hand, the De Lombaert compounds particularly cited by the Examiner and claimed in the patent are phosphorus-containing tetrazole derivatives having the generic formula:



Applicants wish to point out to the Examiner that neither R nor R' in the De Lombaert formula, both of which substituents are oxy-linked to the phosphorus, can be an alkyl group carrying both an amino group and a carboxyl group. Furthermore, De Lombaert provides neither encouragement nor even the remotest suggestion to a person of skill in the art to replace either R or R' with such a group.

Thus, not only does the primary reference of De Lombaert not teach the benzyloxycarbonylaminoalkyl group of Example 1 and other instant compounds (again, as acknowledged by the Examiner), but it does not teach the oxy-linked aminocarboxylic acid group of Example 1 and other instant compounds either. Furthermore, the De Lombaert compounds in question are tetrazole derivatives. In other words, the Examiner's assessment that the De Lombaert compounds are "of the type" of the instant compounds is certainly a stretch in terms of the criteria for determining obviousness. In actuality, De Lombaert contributes nothing that could reasonably be combined with Seido to arrive at the compound of instant Example 1.

This leaves the examination with what Seido teaches. Even if the Examiner's assessment of the relevance of the Seido patent were completely accurate, implicit in the Examiner's combination of Seido with De Lombaert is the acknowledgment that Seido cannot stand on its own as a bar to patentability; as shown above, however, De Lombaert provides nothing of help to Seido.

On top of all this, it should also be pointed out that the Examiner's assertion that the utility of the Seido compounds is the same as that attributed to the De Lombaert compounds is in error. Thus, whether or not the Examiner's assertion that the Seido compounds are "analogous" to other compounds relevant to

this patentability analysis is valid, Seido cannot be said to render obvious the instant invention.

As Seido discloses, a benzyloxycarbonyl group can be used as a protecting group for amino functions (see Seido, column 2, line 66 to column 3, line 1) during synthesis of end-products. This further reinforces what would be clear to anyone of skill in the art reading the Seido disclosure, namely, that the Seido compounds disclosed as inventive are intermediates; on this basis alone, the Seido compounds cannot be said to have the same utility as that of the compounds of the primary reference. Furthermore, the Seido intermediate compounds are to be used in the preparation of Ritalin (see column 1, lines 10-20 of Seido), which compound has no similarity of utility to the De Lombaert compounds. Even if the Seido compounds cited by the Examiner were end-products, their alleged analogousness to other compounds considered during prosecution would still be ineffective in light of the utility analysis of the respective compounds. It might be added for good measure that the instantly claimed utility constitutes yet another utility distinct from that disclosed in either of the references.

For all of the reasons set forth above, there is no way that the cited references, either alone or in combination, can be said to provide a *prima facie* case of obviousness against the instant invention. In fact, there is really no relevant link at

all between the two cited references. It is hereby respectfully requested that the Examiner's stance be reconsidered, the rejection be withdrawn, the search for allowable subject matter be expanded and that, as appropriate, claims not presently being considered be reinstated.

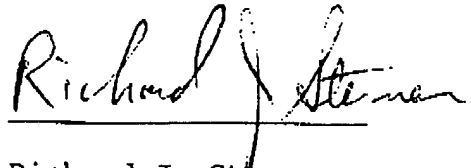
The claims have also been rejected under 35 USC §112, first paragraph as not being enabled on the same basis, i.e., that the present claims do not recite an -O-R₆ linkage. Again, as pointed out above, Applicants never invoked such a linkage in the first place, and their previous arguments did not depend on the existence of an -O-R₆ linkage. This rejection should also be withdrawn.

Elected claims 1, 6, 9, 18 and 20 are patentably distinct over the cited prior art and are enabled. Reconsideration and allowance of these claims, along with additional claims reinstated upon expansion of the search to compounds other than the single elected species, are respectfully requested.

The Assistant Commissioner is hereby authorized to charge
any fees which may be due for any reason to Deposit Account No.
23-1703.

Dated: May 21, 2003

Respectfully submitted,

A handwritten signature in dark ink, appearing to read "Richard J. Sterner", is written over a horizontal line.

Richard J. Sterner
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